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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,370	07/30/2001	Masayoshi Saichi	81868.0033	2545

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EXAMINER

NGUYEN, HANH N

ART UNIT PAPER NUMBER

2834

DATE MAILED: 09/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/919,370

Applicant(s)

SAICHI ET AL.

Examiner

Nguyen N Hanh

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Remarks***

In view of Amendment, The Examiner withdraws the objections to the drawings and the specification.

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

2. Claims 2 and 9 are objected to because of the following informalities: "a bearing member" in line 10 of claim 1 and line 12 of claim 9 should be written as ---the bearing member--- because it refers to "a fixed bearing member" in line 2 of claim 1 and 6. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,3,9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Moritan et al.

Regarding claims 1 and 9, Moritan et al. disclose a motor having a dynamic pressure bearing apparatus comprising: a fixed bearing member (sleeve 21 in Fig. 1c) mounted to a motor frame (23)

a rotating shaft member (12) rotatably inserted with respect to the fixed bearing member;

a lubricating fluid injected into a gap portion between the fixed bearing member and the rotating shaft member (Col. 7, line 43-45);

the rotating shaft member being supported by a dynamic-pressure caused by the lubricating fluid (inherent because a series of herringbone groove pumps lubricant to the end of the shaft creating thrust bearing),

wherein the motor frame (23) is provided with a generally cylindrical bearing hold member (23a) which holds and fixes a bearing member and wherein the bearing hold member includes a bearing contacting portion that bears against a counter plate at a location that is aligned with a thrust dynamic pressure bearing section.

Regarding claims 3 and 11, Moritan et al. also show the motor having a dynamic pressure wherein said fixed bearing member is fixed to the internal circumference of the bearing hold member, and a stator core (24) is fitted to an outer periphery of the bearing hold member.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

Art Unit: 2834

a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,3-6,8,9,11-14,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukutani et al. (Patent number 5,998,898) in view of Moritan et al.

Regarding claims 1 and 9, Fukutani et al. disclose a motor having a dynamic pressure bearing apparatus comprising: a fixed bearing member (sleeve 21 in Fig. 1) mounted to a motor frame (23)

a rotating shaft member (12) rotatably inserted with respect to the fixed bearing member;

a lubricating fluid injected into a gap portion between the fixed bearing member and the rotating shaft member (Col. 6, line 60-62);

the rotating shaft member being supported by a dynamic-pressure caused by the lubricating fluid (Fig. 2 and 3),

wherein the motor frame (23) is provided with a generally cylindrical bearing hold member (32) which holds and fixes a bearing member. The structure disclosed by Fukutani et al. fails to show the bearing hold member includes a bearing contacting portion that bears against a counter plate at a location align with a thrust dynamic pressure bearing section.

However, Moritan et al. disclose the motor wherein the bearing hold member includes a bearing contacting portion that bears against a counter plate at a location align with a thrust dynamic pressure bearing section for the purpose of positioning the counter plate.

Since Moritan et al. and Fukutani et al. are in the same field of endeavor, the purpose disclosed by Moritan et al. would have been recognized in the pertinent art of Fukutani et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Fukutani et al. by member including a bearing contacting portion that bears against a counter plate at a location align with a thrust dynamic pressure bearing section as taught by Moritan et al. for the purpose of positioning the counter plate.

Regarding claims 3 and 11, Fukutani et al. also show the motor having a dynamic pressure wherein said fixed bearing member is fixed to the internal circumference of the bearing hold member, and a stator core (3) is fitted to an outer periphery of the bearing hold member.

Regarding claims 4 and 12, Fukutani et al. also show the motor having a dynamic pressure wherein the bearing hold member includes a core contacting portion (the ring shape area where the stator 24 is affixed to) which abuts in an axial direction with one part of the stator core for positioning the stator core in an axial direction.

Regarding claims 5 and 13, Fukutani et al. also show the motor having a dynamic pressure wherein the motor frame is provided with a position reference surface which is a stator reference surface (the annular surface in which stator core 24 is abutted to in Fig. 1) when the motor is installed to a main apparatus body, and the fixed bearing member is positioned in a normal position in an axial direction with respect to the stator reference surface by the bearing contacting portion (the portion

which the sleeve is abutted to the frame 23) which is provided in the bearing hold member.

Regarding claims 6 and 14, Fukutani et al. also show the motor having a dynamic pressure wherein the rotating shaft member is mounted with a hub carrying a recording disc and a disc placing surface of the hub (intended use, patentable weight not given) is positioned in a normal position in an axial direction with respect to the stator reference surface.

Regarding claims 8 and 16, Fukutani also shows the motor having a dynamic pressure bearing apparatus wherein the bearing contacting portion is formed to abut against a step portion in the axial direction of the fixed bearing member for the purpose of holding the bearing assembly in axial direction at a pre-determined position.

5. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukutani et al. (Patent number 5,998,898) in view of Moritan et al. and further in view of Fukutani (Patent number 5,647,672).

Regarding claims 7 and 15, Fukutani et al. and Moritan et al. show all limitations of the claimed invention except showing the bearing contacting portion is provided with an air-hole which is formed in the center section of the bearing contacting portion which is formed in the bearing hold member in an axial direction.

However, Fukutani discloses the motor wherein the bearing contacting portion is provided with an air-hole (the inside cylindrical tube formed in the bottom of housing 21) which is formed in the center section of the bearing contacting portion which is

formed in the bearing hold member in an axial direction for the purpose of exhausting the compressed air when the sleeve is inserted to the bearing hold member.

Since Fukutani, Moritan et al. and Fukutani et al. are in the same field of endeavor, the purpose disclosed by Fukutani would have been recognized in the pertinent art of Fukutani et al. and Moritan et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Fukutani et al. and Moritan et al. by make an opening in the center section of the bearing contacting portion to form an air-hole which is formed in the center section of the bearing contacting portion as taught by Fukutani for the purpose of exhausting the compressed air when the sleeve is inserted to the bearing hold member.

6. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukutani et al. (Patent number 5,998,898) in view of Moritan et al. and further in view of Hayashi.

Regarding claims 2 and 10, Fukutani et al. and Moritan et al. show all limitations of the claimed invention except showing the motor having a dynamic pressure wherein the fixed bearing member is fixed to the bearing hold member by an adhesive material.

However, Hayashi discloses the motor wherein the sleeve (bearing cylinder 27 in Fig. 1 and Col.4, lines 57-60) is fixed to the bearing hold member (26) by an adhesive material for the purpose of improving the holding ability.



Since Fukutani et al., Moritan et al. and Hayashi in the same field of endeavor, the purpose disclosed by Hayashi would have been recognized in the pertinent art of Fukutani et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Fukutani et al. and Moritan et al. by using adhesive material to fix the fixed bearing member to the bearing hold member as taught by Fukutani for the purpose of improving the holding ability.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Information on How to Contact USPTO***

Art Unit: 2834

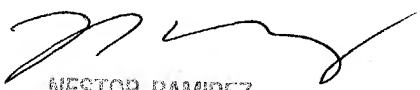
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703)305-3466. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

HNN

September 16, 2002

  
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